

REMARKS

Claims 1-10 and 18-48 are in the application. Applicants elect with traverse claims 18-20, 36, 41 and 45-46 of Group III, drawn to a polymerized cross-linked chiral compound. Applicants traverse the restriction requirement on the basis that the Examiner has not established that examining all the claim limitations in the application would constitute a serious burden. See M.P.E.P. §803. Furthermore, the Restriction Requirement fails to take in account the fact that the polymerized cross-linked chiral compound claims of Group III are related to the process of making such polymerized cross-linked chiral compounds of Group VI. This is because process claims 34 and 35 produce the polymerized chiral compounds of Group III.

Thus, pursuant to M.P.E.P. §806(f) (Method of Making) the Examiner has the burden of establishing:

“(1) that the process [*sic* method] *claimed* is not an obvious process of making the product and the process as *claimed* can be used to make other and different products, or (2) that the product *as claimed* can be made by another and materially different process.” (M.P.E.P. §806.05(f); Process of Making)

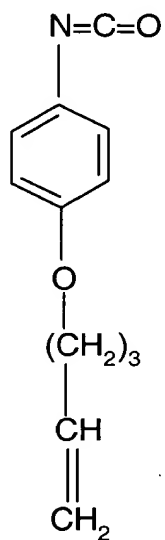
Moreover, (M.P.E.P. §806.05(i) states that:

“where the product claims are allowable (i.e., novel and nonobvious), restriction may be required only where the process of making and the product made are distinct (M.P.E.P. §806.05(f)); otherwise, the process of using must be joined with the process of making and product made, even if a showing of distinctness can be made between the product and process of using (M.P.E.P. §806.05(h)).”

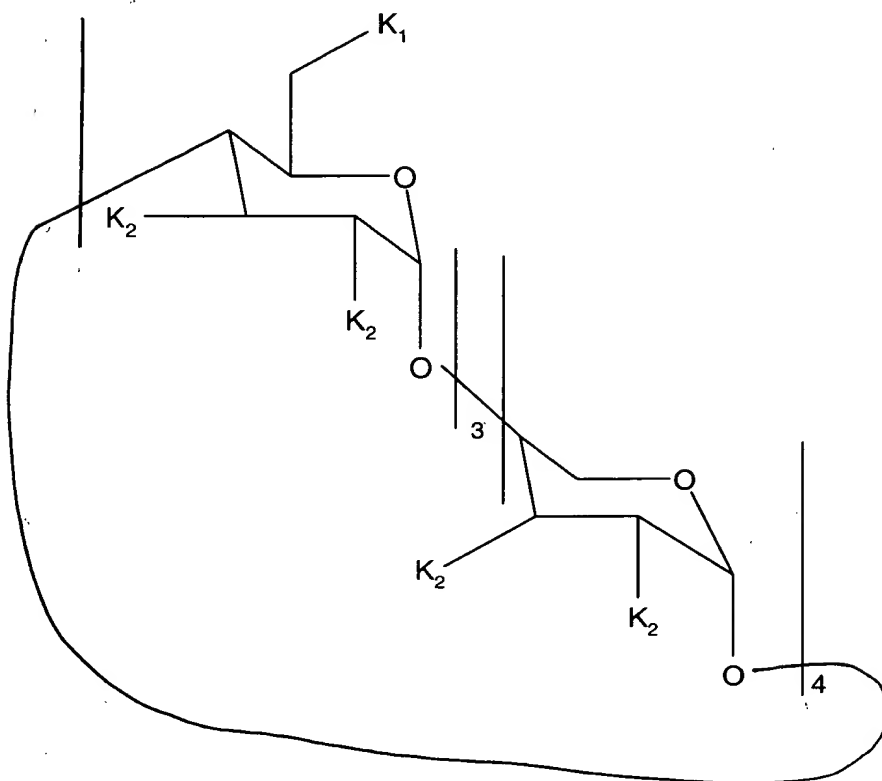
Thus, without a showing of distinctness between the process of making and product made, claims of Group III and VI should be rejoined ab initio, not just once the product claims are allowed. Nonetheless, Applicants respectfully submit that if the Examiner refuses to join the claims now, then the claims of Group VI should be rejoined to the claims of Group III once they are indicated as allowed, pursuant to M.P.E.P. §809. Consequently, Applicants respectfully request that the restriction requirement be withdrawn.

In the elected species of Group III:

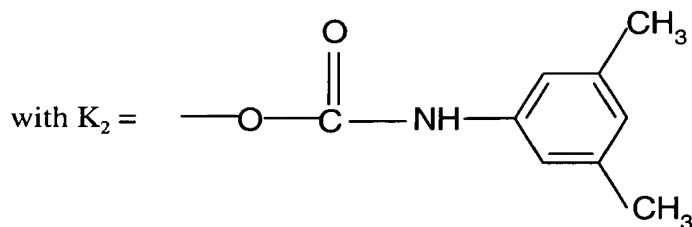
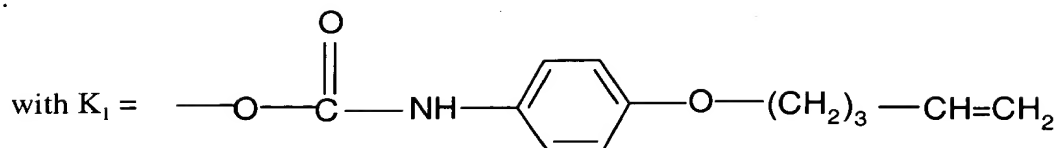
1. The alkenyloxyaryl type compound of formula $[R-CH=CH-(X)-O]_n-Ar-Q$ is:



2. The chiral unit is :

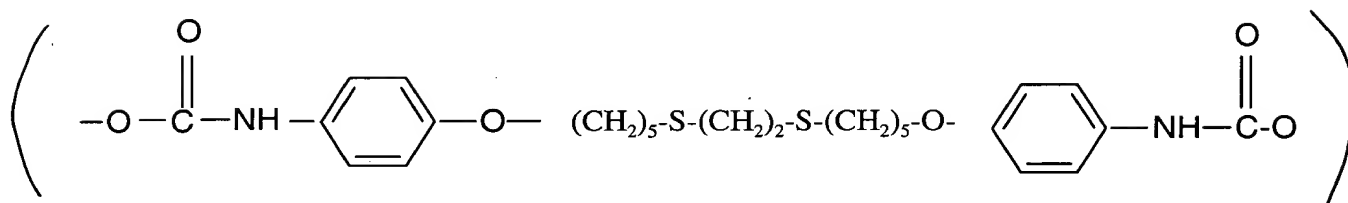


where:

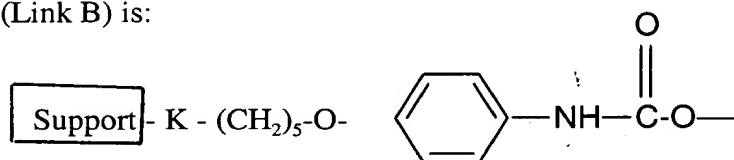


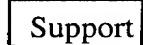
3. $q = 4$; s is between 1 and 20,000, and $r = 4$.

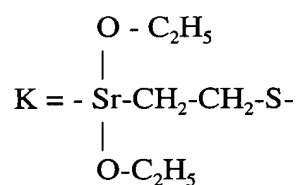
4. (Link A) is:



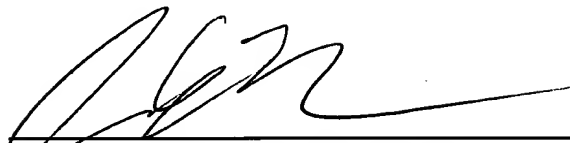
5. (Link B) is:



 = Silica



Respectfully submitted,



James E. Ruland (Reg. No. 37,432)
Attorney for Applicant(s)

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza I
2200 Clarendon Blvd., Suite 1400
Arlington, VA 22201
Direct Dial: (703) 812-5338

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

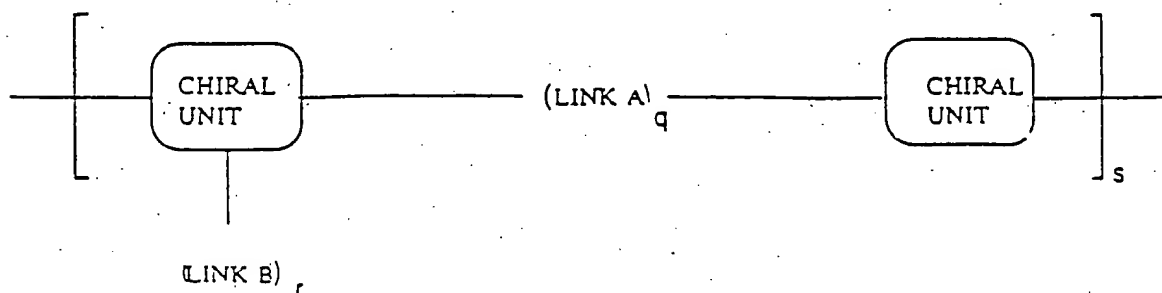
IN THE CLAIMS

Claims 18, 19 and 36 has been amended as follows:

18. (Twice Amended) A polymerised and cross-linked chiral compound ~~according to claim 13~~ obtained by reaction of at least one hydrogen of an alcohol, amine or thiol function of at least one chiral unit of a product with at least one group Q of a bifunctional alkenyloxyaryl or alkenylaryloxyaryl type compound with general formula [R-CH=CH-(X)-O]_n-Ar-Q,

where Q is a group which is reactive towards a hydrogen carried by a heteroatom selected from the group formed by oxygen, nitrogen and sulphur, or a precursor of such a group and where:

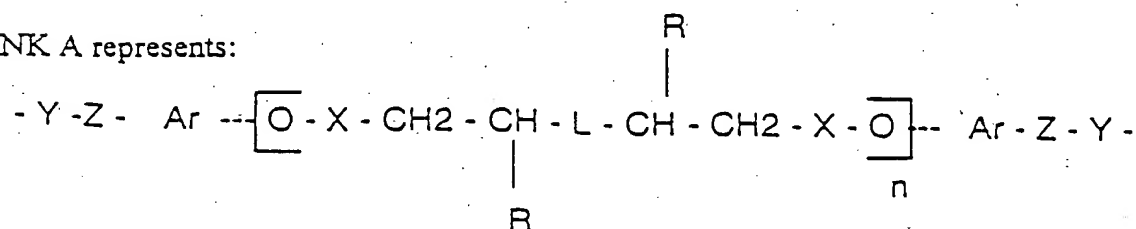
- n is in the range 1 to 20;
- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, which may be substituted;
- X is an optional linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, which may be substituted with at least one group selected from the group formed by hydrogen, alkyl, alkoxy, hydroxyl and trihalogenoalkyl groups;
- Ar is an aryl or polyaryl group, which may be substituted with at least one hydrogen atom or with at least one group selected from the group formed by alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde acid or ester groups;
excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate or its ester, amide, urea, carbamate, thioester or thiocarbamate derivatives with general formula (I):



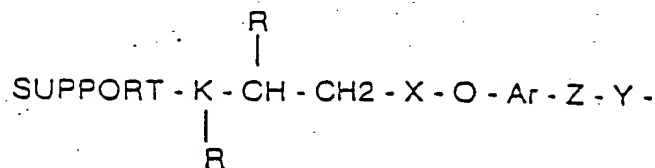
where:

- q is at least 1 and less than 20;
- s is at least 1 and less than 20000;
- if $r = 0$, the compound is a pure cross-linked chiral polymer, oligomer or monomer;
- if $r \geq 1$, the compound is a chiral polymer, oligomer, or monomer which is cross-linked in a three-dimensional network and bonded to a cross-linked support.

LINK A represents:



LINK B represents:



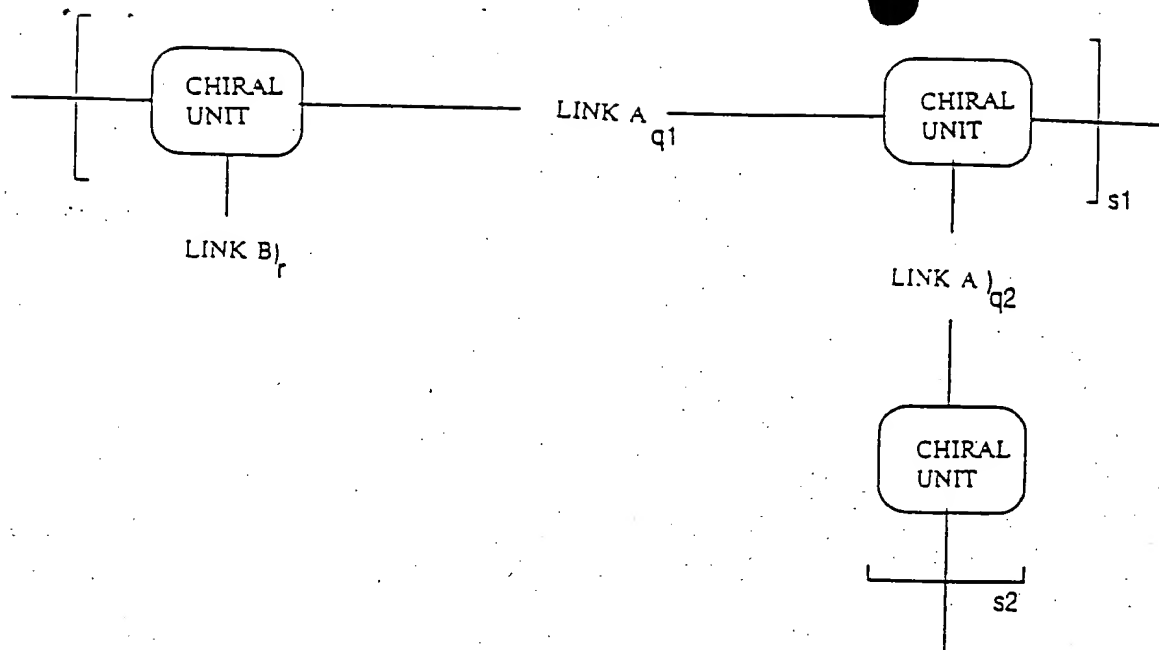
- “chiral unit” represents a monomeric, oligomeric, cyclooligomeric or polymeric chiral compound and optionally comprises a primary or second amine function or a primary, secondary or tertiary hydroxyl function or a sulphhydryl function and in which all or a portion of these functions have optionally been modified to the ester, amide, urea, carbamate, thioester or thiocarbamate;
- Z represents a $-\text{CH}_2-$ group or a $-\text{CO}-$ group or a $-\text{NH}-\text{CO}-$ group or a $-\text{NH}-\text{CS}-$ group;
- Y represents a sulphur or oxygen atom or the amino group;
- n is in the range of 1 to 20;
- Ar represents an aryl or polyaryl group;
- X represents an alkyl or aryl group;
- R represents an alkyl group or hydrogen;

- L represents a single bond of a bis-sulphhydryl or a silane or an ethylene group which may be substituted or a disiloxane;
- K represents a single bond or a siloxane or a silane;
- “support” represents an organic or mineral support; functionalised by an alkene or a hydrogenosilane or a sulphhydryl.

19. (Twice Amended) A polymerised and cross-linked chiral compound according to claim 13 obtained by reaction of at least one hydrogen of an alcohol, amine or thiol function of at least one chiral unit of a product with at least one group Q of a bifunctional alkenyloxyaryl or alkenylaryloxyaryl type compound with general formula [R-CH=CH-(X)-O]_n-Ar-Q,

where Q is a group which is reactive towards a hydrogen carried by a heteroatom selected from the group formed by oxygen, nitrogen and sulphur, or a precursor of such a group and where:

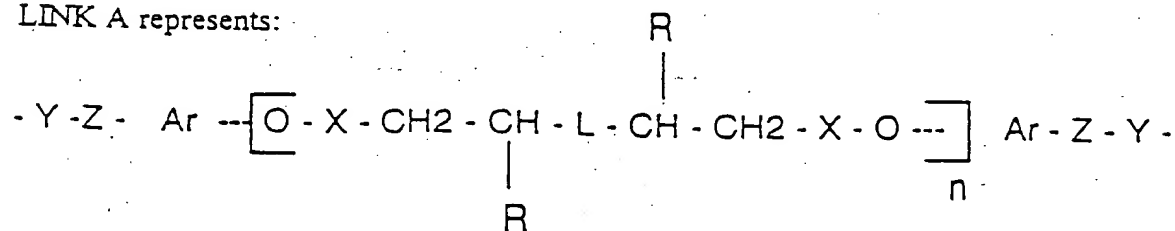
- n is in the range 1 to 20;
- R is hydrogen or a linear or branched alkyl group or a linear or branched alkoxy group or hydroxyl or an aryl group, which may be substituted;
- X is an optional linear alkyl group carrying more than one carbon atom or a branched alkyl group, or an aryl group, which may be substituted with at least one group selected from the group formed by hydrogen, alkyl, alkoxy, hydroxyl and trihalogenoalkyl groups;
- Ar is an aryl or polyaryl group, which may be substituted with at least one hydrogen atom or with at least one group selected from the group formed by alkyl, alkoxy, hydroxyl, trihalogenoalkyl, silyl, thiol, amino, amino, aminoalkyl, amide, nitro, nitrosamino, N-amino, aldehyde acid or ester groups;
excluding the following compounds: 4-allyloxyaniline, 4-allyloxybenzoic acid, its acid chloride, and 4-allyloxyphenylisocyanate or its ester, amide, urea, carbamate, thioester or thiocarbamate derivatives, with general formula:



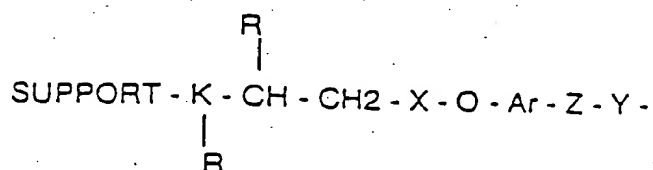
where:

- q_1 and q_2 are each at least 1 and less than 20;
- s_1 and s_2 are each at least 1 and less than 20000;
- if $r = 0$, the compound is a pure cross-linked chiral polymer, oligomer or monomer;
- if $r \geq 1$, the compound is a chiral polymer, oligomer or monomer which is cross-linked in a three-dimensional network and bonded to a cross-linked support;

LINK A represents:



LINK B represents:



- “chiral unit” represents a monomeric, oligomeric, cyclooligomeric or polymeric chiral compound and optionally comprises a primary or second amine function or a primary, secondary or tertiary hydroxyl function or a sulphhydryl function and in which all or a portion of these functions have optionally been modified to the ester, amide, urea, carbamate, thioester or thiocarbamate;
- Z represents a $\text{-CH}_2\text{-}$ group or a -CO- group or a -NH-CO- group or a -NH-CS- group;
- Y represents a sulphur or oxygen atom or the amino group;
- n is in the range of 1 to 20;
- Ar represents an aryl or polyaryl group;
- X represents an alkyl or aryl group;
- R represents an alkyl group or hydrogen;
- L represents a single bond of a bis-sulphhydryl or a silane or an ethylene group which may be substituted or a disiloxane;
- K represents a single bond or a siloxane or a silane;
- “support” represents an organic or mineral support; functionalised by an alkene or a hydrogenosilane or a sulphhydryl.

36. (Amended) A process according to claim 18 34 wherein said polymerized and cross-linked chiral compounds has the following formulae:

